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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,109

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Brian L Riise

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FISH & RICHARDSON P.C.
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

BROWN II, DAVID N

ART UNIT

PAPER NUMBER

4111

MAIL DATE

DELIVERY MODE

08/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,109	Applicant(s) RIISE ET AL.	
	Examiner DAVID N. BROWN II	Art Unit 4111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 67-113 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 67-113 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 68-114 have been renumbered 67-113.

Election/Restrictions

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I claim(s) 67-87 drawn to a recycled thermoplastic resin.

Group II, claim(s) 88-90, drawn to a method of preparing a recycled thermoplastic material.

Group III, claim(s) 91-113, drawn to a method of preparing a recycled plastic material.

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: there is no single inventive concept for the three groups. All three groups require the limitation of a recycled thermoplastic resin, however, this is not considered to be an inventive concept. The following limitations are considered to be the special technical features in the

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respective independent claims in each group; however they do not share a common special technical feature.

Group	Claims	Requirements	Technical Feature
I	67-87	<p>A. about 20- 99.9% of one or more polymers of a primary type</p> <p>B. about 0.1-40% additives</p> <p>C. one or more polymers of one or more secondary polymer types that are dissimilar to the primary polymer type</p> <p>D. the one or more polymers of secondary polymer types including one or more of from 0-79% of one or more polymers of one or more secondary polymer types that are compatible with the first polymer type or from 0-40% of one or more polymers of one or more second polymer types that are incompatible with the first polymer type</p> <p>E. wherein the polymers of the primary polymer type or the secondary polymer types include two or more grades of polymers</p>	The composition of the resin
II	88-90	<p>A. selecting one or more waste plastic materials based on the source</p> <p>B. combining the selected waste plastic materials to achieve a recycled plastic material having one or more predetermined properties</p>	Grouping material based on source
III	91-113	<p>A. providing waste plastic material</p> <p>B. separating the waste plastic material into two or more primary groups of plastic materials</p> <p>C. determining amounts of a first group of the primary groups of plastic materials and at least one other plastic material to provide one or more predetermined properties of a recycled plastic material; and</p>	Sorting material based on chemical composition

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		D. combining the first group of the primary groups of plastic materials and the at least one other plastic material to provide the recycled plastic material.	
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3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Set I:

Species of claim 67	Primary type
1	Impact styrene acrylonitrile
2	Impact polystyrene
3	Polypropylene
4	Polycarbonate

Set II:

Combining species of claim 91	Combination
5	Combining First primary group with second primary group
6	Combining First primary group with secondary group
7	Combining First primary group with virgin

Set III:

Determining species of claim 91	Determination
8	Determining amount of 1 st ABS vs 2 nd ABS
9	Determining amount of ABS vs HIPS
10	Determining amount of PPO vs HIPS
11	Determining amount of ABS vs PC
12	Determining amount of ABS vs treated PC
13	Determining amount of ABS vs PC/ABS
14	Determining amount of ABS vs predetermined SAN
15	Determining amount of 1st ABS vs 2 nd

	ABS
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Set IV

Species of 107	Selection of Secondary polymer
16	Polypropylene, polyethylene, or polypropylene compatible
17	Polycarbonate, PC/ABS, acrylonitrile butadiene styrene, acrylonitrile styrene acrylate, or polycarbonate compatible
18	impact modified styrene. polystyrene, polyphenylene, or HIPS compatible

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

Claim 67 with species 1-4, Claim 91 with species 5-16, Claim 106 with species 17-19.

The following claim(s) are generic: 67, 91, and 106.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID N. BROWN II whose telephone number is (571)270-5497. The examiner can normally be reached on Monday-Thursday 7:30a-5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Yao can be reached on (571)-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID N. BROWN II/
Examiner, Art Unit 4111

/Sam Chuan C. Yao/
Supervisory Patent Examiner, Art Unit 4111